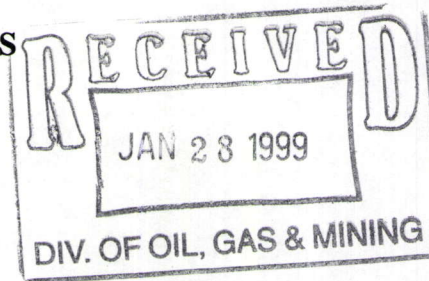


STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad center, Suite 350
Salt Lake City, Utah 84180-1203
Telephone: (801) 538-5340
Fax: (801) 359-3940



ANNUAL REPORT OF MINING OPERATIONS

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, as amended, and the General Rules as promulgated under the Utah Minerals Regulatory Program. An operator conducting mining operations under a Notice of Intention must file an annual operations and progress report (FORM MR-AR) with the Division.

I. General Information

1. Report Time Period: From (mo./yr.) **1/98** To (mo./yr.) **12/98**
2. DOGM File Number (Mine No.): **M/045/004**
3. Mine Name: **Pine Canyon Reclamation Project**
4. Mineral(s) Mined (or permitted to mine): **Copper and associated metals.**
5. Type of mine: ☐ Surface Mine or ☒ Underground Mine
6. Legal Description, (Location of Lands Affected):

Section 17, S1/2, SW1/4;

Section 20, N1/2 NW1/4, W1/2 NE1/4, SE1/4 NE1/4, E1/2 SE1/4;

Section 21, SW1/4 SW1/4;

Section 28, W1/2 NW1/4;

Section 29, NE1/4 NE1/4;

Township 3 South, Range 3 West, Salt Lake Baseline and Meridian, Tooele County, Utah.

7. Name of Operator or Company: Kennecott Utah Copper Corporation
8. Permanent Street Address: P. O. Box 6001
City, State, Zip: 8315 W. 3595 South
Magna, UT 84044
Phone: (801) 252-3257
9. Company Representative (or designated operator):
Name: Paula Doughty
Title: Manager, Environmental Compliance
Business Address: P.O. Box 6001
City, State, Zip: Magna, UT 84044
Phone: (801) 252-3257

☐ Please check if any of the above information has changed since previous year.

II. Mining and Reclamation

1. Was the mine active during the past year? Yes ☐ No ☒
2. If active, how much ore or mineral was mined?

The mine was not active in 1998.
3. How much additional acreage was disturbed during the past year? 0 acres
4. Briefly describe any new or additional surface disturbances that occurred during the past year. This description should include the type of work performed, and volume of material moved.

No new or additional acreage was affected during this reporting period.
5. How much acreage was reclaimed during the past year?

No reclamation took place in 1998.
6. Briefly describe the reclamation work performed during the past year. This description should include methods employed, and an evaluation of the results.

No new reclamation took place in 1998.
7. What is the total disturbed acreage at years end?

The only disturbed acreage left in Pine Canyon are those sites identified in the 1988 reclamation plan that were left for long term use in the canyon. These sites include

the Pine Canyon tunnel portal and concrete flume, production shaft headframe, access road, the warehouse/shop, culinary water system, water supply wells, power line to the wells, fresh water tank and the waste rock pile adjacent to the headframe.

8. Briefly summarize any mining and/or reclamation plans for the upcoming year.

No new reclamation activities are planned for 1999, however, the past revegetation efforts will be monitored for success. KUC is still evaluating potential uses of the Pine Canyon underground workings as part of KUC's overall water management program.

NOTE: Section III., "Additional Information" applies only to **large mining operations.**

III. Additional Information

1. An updated surface facilities map should be attached if there have been significant changes since the previous map was submitted.

No map is attached because there have been no significant changes to the area since a map was submitted last year.

2. Any monitoring results or other reports that are required under the terms of the approved notice of intention should also be submitted.

Water level data from the Carr Fork Exhaust shaft which is part of the Pine Canyon underground workings is attached. A water sample was collected from the Carr Fork Service shaft in Pine Canyon on December 3, 1998. The analytical results from this sample are attached.

IV. Signature Requirement

I hereby certify that the foregoing is true and correct.

Name (Typed or Print): Paula Doughty

Title of Operator: Manager, Environmental Compliance

Signature of Operator: Paula Doughty

Date: 1/26/99

**1998 Carr Fork Exhaust Shaft
Water Level Soundings**

<u>Date & Time</u>	<u>Water Elev. (ft amsl)</u>
1/19/98 10:45	6146.89
2/18/98 10:06	6149.89
3/19/98 12:35	6115.15
4/20/98 10:24	5966.92
5/18/98 10:00	5898.00
6/18/98 10:00	5832.15
7/18/98 10:00	5710.60
8/20/98 16:00	5917.19
9/18/98 10:00	5702.23
10/18/98 10:00	5585.53
11/10/98 12:00	5474.15
12/18/98 15:10	5783.58

Certificate of Analysis -- January 7, 1999

Carr Fork Service Shaft in Pine Canyon

Well Designation: **BMS1356**

Page 1

Collection Date: 12/03/98

Submission Date: 12/04/98

Total
Metals

Dissolved
Metals

KEL Sample ID Numbers

AG24002

AG24003

Analyte	Method	Units	CRDL	Result	Result
* Conductivity	120 1	Micro mho/cm	1	970	
Corrosivity	2330		0 01	NOT APPLICABL	
* pH	150 1			7 45	
* Temperature	170 1	Degrees C		13 8	
* Dissolved Oxygen	KUC SOP	mg/L	1 0	3 1	
Alkalinity	310 1	mg/L as CaCO3	5	238	
Specific Ion Free Cyanide	KEL Methods	mg/L	0 1	Below CRDL	
Hardness	130 1	mg/L as CaCO3	5	540	
Ammonia Nitrogen	SIE	mg/L	0 50	Below CRDL	
Silica	CPA	mg/L	2	11	
Total Dissolved Solids	160 1	mg/L	20	628	
Total Suspended Solids	160 2	mg/L	3 0	Below CRDL	
Turbidity	180 1	ntu	1 00	<1	
Ortho-phosphate	365 1	mg/L	0 10	Below CRDL	
Calcium	200 1	mg/L	1 0	129	
Chloride	9251	mg/L	5	13	
Epa Total Cyanide	335 2	mg/L	0 005	Below CRDL	
Fluoride	340.2	mg/L	0 1	0 2	
Mercury	245 2	ug/L	0 2	Below CRDL	
Potassium	258 1	mg/L	0 5	2 8	
Magnesium	243 1	mg/L	1 0	53	
Sodium	273 1	mg/L	1 0	13	
Nitrite Nitrogen	354 1	mg/L	0 05	Below CRDL	
Nitrate Nitrogen	353 2	mg/L	0 20	Below CRDL	
Sulfate	9036	mg/L	5	357	
Silver	200 8	ug/L	1	Below CRDL	Below CRDL
Aluminum	200 8	ug/L	5	55	Below CRDL
Arsenic	200 8	ug/L	5	45	Below CRDL
Boron	200 8	ug/L	10	36	11
Barium	200 8	ug/L	10	30	30
Beryllium	200 8	ug/L	2	Below CRDL	Below CRDL
Cadmium	200 8	ug/L	1	Below CRDL	Below CRDL
Chromium	200 8	ug/L	10	Below CRDL	Below CRDL
Copper	200 8	ug/L	20	Below CRDL	Below CRDL
Iron	236 1	ug/L	300	Below CRDL	Below CRDL
Manganese	200 8	ug/L	10	15	14
Nickel	200 8	ug/L	40	Below CRDL	Below CRDL
Lead	200.8	ug/L	5	10	6
Antimony	200.8	ug/L	5	Below CRDL	Below CRDL
Selenium	200 8	ug/L	3	Below CRDL	Below CRDL
Thallium	200 8	ug/L	10	Below CRDL	Below CRDL
Zinc	200 8	ug/L	20	1330	1200

Approved By: *Lynn A. Hutchinson*
KEL Laboratory Director

* = Included for information purposes only, not performed by KEL

N/A = Not Analyzed

The Contract Required Detection Limits (CRDL) are minimum reporting limits required by the Ground Water Characterization and Monitoring Plan (GCMF)

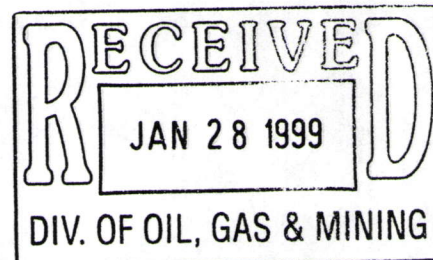
Kennecott Utah Copper Corporation
8315 West 3595 South
P.O. Box 6001
Magna, Utah 84044-6001
Tel: (801) 252-3257
Fax: (801) 252-3125

Paula H. Doughty
Manager, Environmental Compliance

Kennecott

January 27, 1999

Mr. Wayne Hedberg, Permit Supervisor
Minerals Reclamation Program
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801



Subject: Annual Reports for 1998, Kennecott Utah Copper Corporation

Dear Mr. Hedberg:

Enclosed are the completed Kennecott Utah Copper Corporation (KUCC) annual report forms for the following DOGM permits:

M/035/002	Bingham Pit and UCD Modernization,
M/035/011	4th Line/Copperton Concentrator,
M/035/015	North Impoundment,
M/045/004	Pine Canyon Reclamation Project.

Color aerial photographs of the entire Oquirrh Mountain Range were taken at a nominal scale of 1:24,000 on August 5, 1998. These photographs were used in conjunction with a 1:24,000 scale base map to make revised estimates of disturbed areas within each permit boundary. Also, in this year's reports, all disturbed and reclaimed acreage on the existing tailings impoundment is reported under permit number M/035/002.

In addition to the reclamation activities documented in the attached reports, the following work was conducted by KUCC in the Oquirrh Mountains outside of the DOGM jurisdictional boundaries:

Refinery area - approximately 16 acres were fertilized or treated with biosolids and seeded.

In 1998 KUCC spent more than \$300,000 on reclamation activities within the boundaries of permit #M/035/002. These costs included purchases of seed, fertilizer, mycorrhizae and trees, seedbed preparation, application and planting. Excluded from these costs are such activities as

contaminated soil removals, major recontouring efforts and soil emplacement which were paid for by the individual construction and remediation projects. After correcting for inflation, this equates to more than \$120,000 spent in 1978 dollars. This is well in excess of the \$50,000 annual expenditure required by permit #M/035/002.

If you have any questions about these annual reports, please contact Rich Borden at 569-6208.

Sincerely,

A handwritten signature in black ink, appearing to read "Paula Doughty". The signature is fluid and cursive, with the first name "Paula" written in a larger, more prominent script than the last name "Doughty".

Paula Doughty
Manager, Environmental Compliance

Enclosures